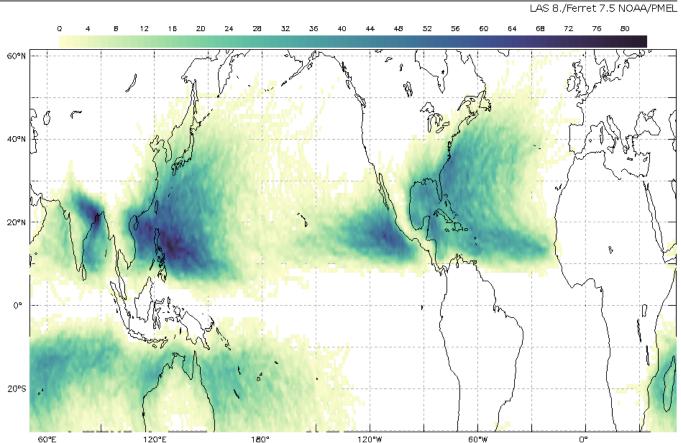
My NASA Data - Mini Lesson

Tropical Cyclone Counts Create Bar/Column Chart

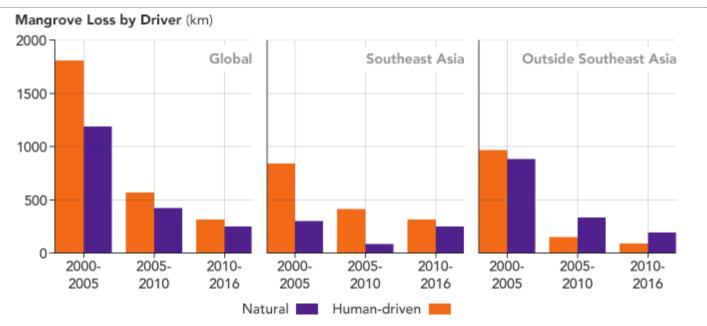
DATASET: Tropical Cyclones VARIABLE: Number of Tropical Cyclones (1842 - 2018) (dimensionless (count))



Mini Lesson

A **bar chart/graph** (also known as a column chart) is a type of graph that plots data in rectangular bars or columns that may be either horizontal or vertical. Bar charts are useful for comparing two or more categories or changes in those categories. One axis represents the category/categories, while the other axis represents the value. The length of the bars or columns matches the data values that they represent.

Bar charts may also be *clustered* or *grouped*, where several bars are charted along the same axis and grouped into categories. See the graph below of Mangrove Loss for an example of a clustered or grouped bar chart.



Credit: NASA ???????

Section A: Plan Your Bar/Column Chart

- 1. What variable/value will you plot on the x-axis?
- 2. What variable/value will you plot on the y-axis?
- 3. What title will you use?
- 4. What will your scale (i.e., the minimum and maximum values of your graph) be for your value axis? Your category axis?
- 5. What interval will work best for the scale of your graph (e.g., 1, 2, 4, 5, 10, 15, etc) for each axis? (The graph interval is the amount between one value and the next, which always starts at zero and is consistently spaced.)
- 6. What color/pattern will represent the 60° East bars on your chart? The 65° East bars?

Section B: Create the Bar Chart Using the Answers to the Planning Questions

- 1. Draw and label the x-axis and the y-axis.
- 2. Label each axis.
- 3. Add the title.
- 4. Draw each bar on the graph. (Remember to use a different color/ pattern for your 60° East and 65° East bars and to include a key.)

Data Table - Tropical Cyclone Counts at 60° E and 65° E from 10° N - 20° N

Degrees of Latitude	Tropical Cyclone Counts	Tropical Cyclone Counts
°N	at 60 °E (Longitude)	at 65 °E (Longitude)
10	3	7
11	2	1
12	15	5
13	12	3
14	15	8
15	6	8

16	0	9
17	0	13
18	0	13
19	7	14
20	12	18

Teachers who are interested in receiving the answer key, please contact MND from your school email address at larc-mynasadata@mail.nasa.gov.